

# WILLOW

## ELEVATION B

# PRINCE PLACE LOT 49



- INCLUDED OPTIONS:**
- 1st FLOOR**  
**SCREENED PORCH**  
**EXTENDED FAMILY ROOM**  
**GOURMET KITCHEN**  
**FIXED WINDOWS @ BREAKFAST**  
**GUEST SUITE W/ FULL BATH**  
**GUEST SHOWER ILO TUB**  
**TRAY @ DINING**  
**OPEN STAIR RAIL**  
**BOX OAK STAIRS**
- 2nd FLOOR**  
**FIXED WINDOWS @ OWNERS**  
**TRAY @ OWNERS**  
**OWNERS SPA SHOWER**  
**SECOND SINK @ BATH 2**  
**BEDROOM 4**

WILLOW BASE HOUSE SQUARE FOOTAGE CALCULATIONS						TOTAL UNDER ROOF
ELEVATIONS	1st FLOOR	2nd FLOOR	TOTAL FIN	FRONT PORCH	GARAGE	
ELEV. B	1053 s.f.	1287 s.f.	2340 s.f.	159 s.f.	466 s.f.	2,965 s.f.
OPTIONS SQUARE FOOTAGE CALCULATIONS						
EXTENDED FAMILY W/ ALTERNATE GUEST SUITE					130 s.f.	
COVERED PORCH					120 s.f.	

**CRAWL VENTING**  
 1053 SQ FT OF FOUNDATION TO BE VENTED  
 150 SQ FT / 7.1 SQ FT = 7.02 SQ FT VENTILATION  
 VENTS 128 SQ IN = (0.8889 SQ FT)

CRAWL VENT  
 7.020 SQ FT = 25.3 VENTS REQUIRED  
 0.2778 SQ FT

ACTUAL CRAWL VENTS PROVIDED 26

NOTE: WHERE AN APPROVED VAPER BARRIER IS INSTALLED OVER GROUND SURFACE THE REQUIRED VENTILATION MAY BE REDUCED BY 50%

REVISION NUMBER	ADDED BASEMENT FOUNDATIONS	UPDATED SHOWER OPTIONS	ADDED GAR SVR DR & OPT EXT FAMILY	ADD OPT PORCHS TO OPT EXT FAMILY	REVISION TO WH & GARAGE DOORS	FIX WINDOW SIZE TO 2626 FX ON D
03/05/2020						
7/1/2020						
10/23/2020						
11/6/2020						
3/30/2021						
02/24/2022						

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 O. (404) 996-5722

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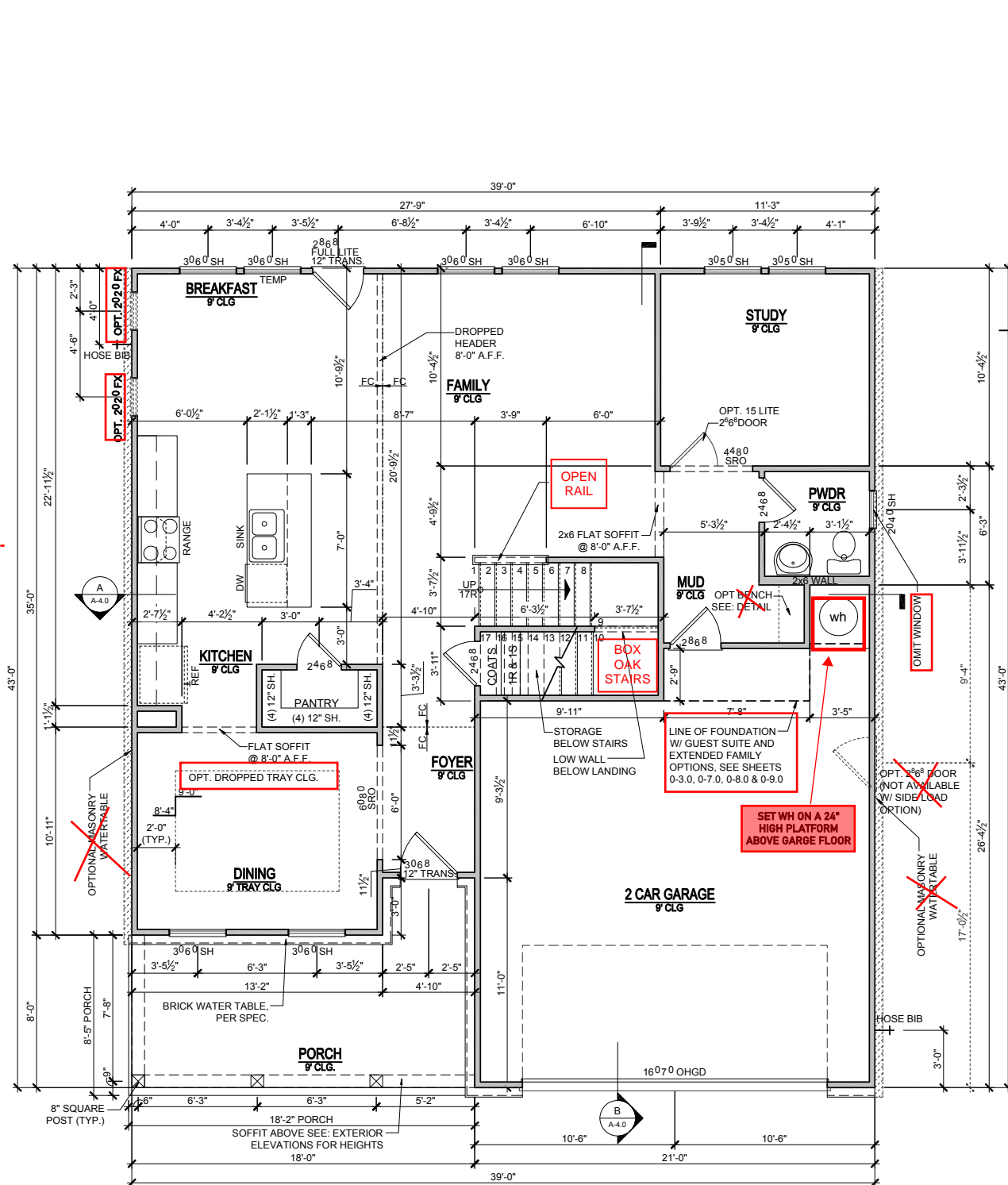
RELEASE DATE	08-21-2019	1/8" = 1'-0"
PROJECT NUMBER		
OPTION NO.		

MODEL	WILLOW
DRAWING TITLE	COVER SHEET
OPTION DESCRIPTION	

SHEET NO.  
**CS-1.0**

# PRINCE PLACE LOT 49

**NOTE; PROPANE TANK TO BE SET 5' FROM VENTS 10' FROM IGNITION**

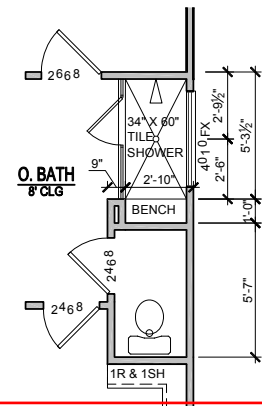


**ELEVATION - B  
1st FLOOR PLAN**  
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

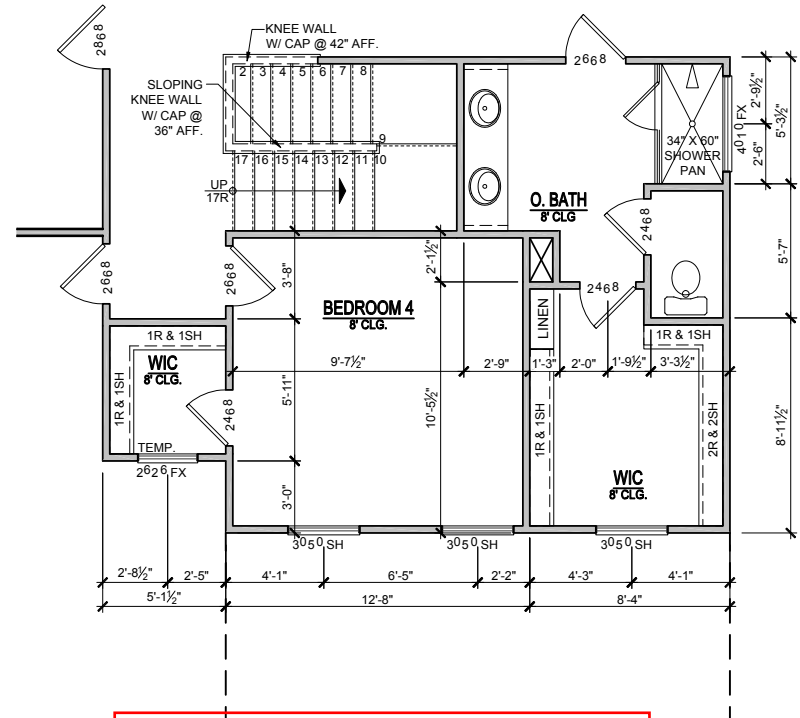
ELEVATION "A - C"

REVISION NUMBER	03/05/2020	ADDED BASEMENT FOUNDATIONS
	7/1/2020	UPDATED SHOWER OPTIONS
	10/23/2020	ADDED GAR SVR DR & OPT EXT FAMILY
	11/6/2020	ADD OPT PORCHS TO OPT EXT FAMILY
	3/30/2021	REVISION TO WH & GARAGE DOORS
	02/24/2022	FIX WINDOW SIZE TO 2626 FX ON D
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<p><b>DAVIDSON HOMES</b> Your Community Builder</p>		
RELEASE DATE	08-21-2019	
PROJECT NUMBER	---	
OPTION NO.	---	
MODEL	<b>WILLOW</b>	
DRAWING TITLE	<b>FIRST FLOOR PLAN</b>	
OPTION DESCRIPTION	<b>ELEVATION - B</b>	
SHEET NO.	<b>A-1.0B</b>	

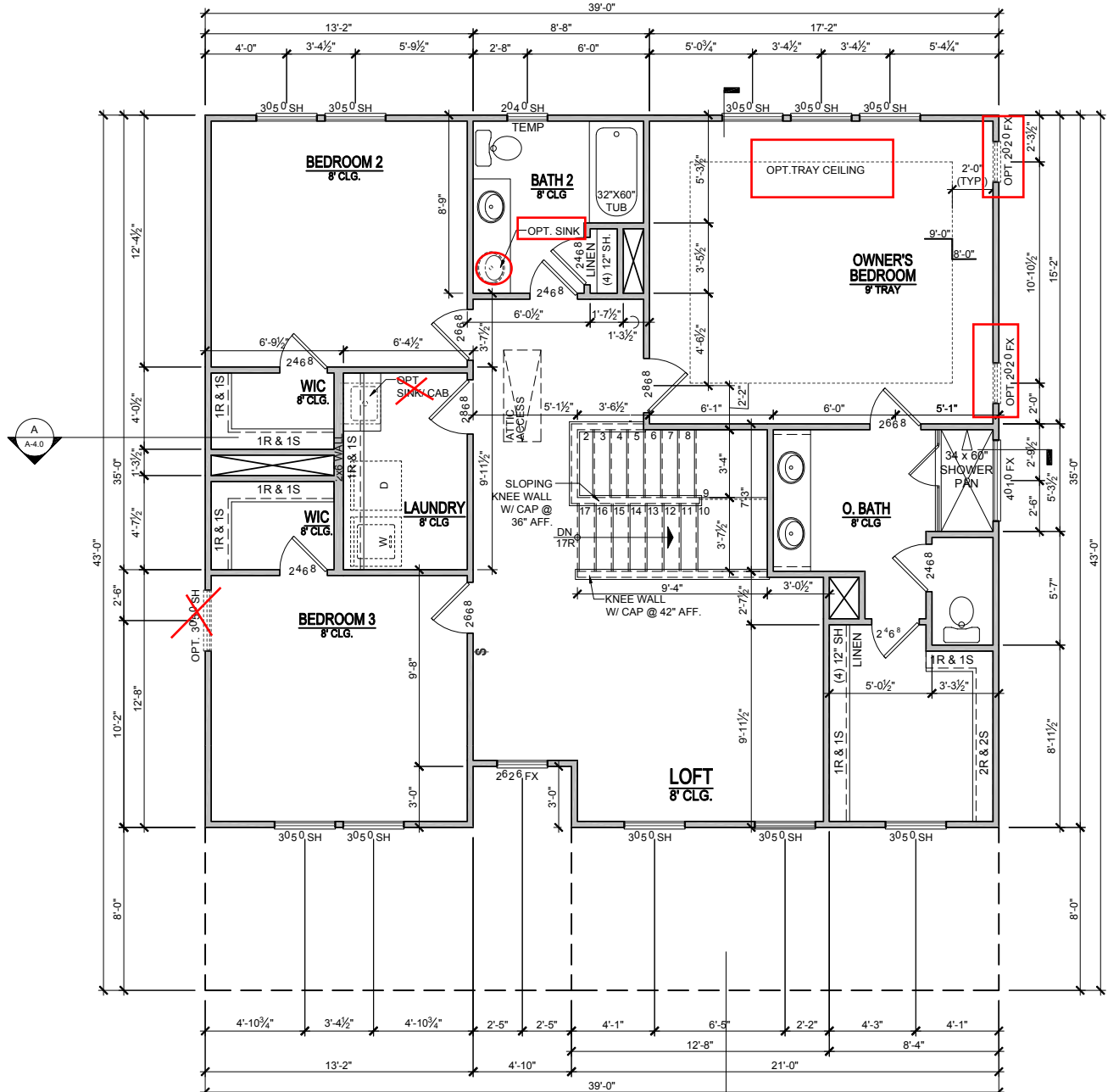
# PRINCE PLACE LOT 49



**OPT. SPA SHOWER**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



**ELEVATION 'B'  
 OPT. BEDROOM 4 LAYOUT**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



**ELEVATION - B  
 2nd FLOOR PLAN**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

REVISION NUMBER	DESCRIPTION
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10/23/2020	ADDED GAR SVR DR & OPT EXT FAMILY
11/6/2020	ADD OPT PORCHS TO OPT EXT FAMILY
3/30/2021	REVISION TO WH & GARAGE DOORS
02/24/2022	FIX WINDOW SIZE TO 2626 FX ON D

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RELEASE DATE	08-21-2019
PROJECT NUMBER	---
OPTION NO.	---
MODEL	<b>WILLOW</b>
DRAWING TITLE	<b>SECOND FLOOR PLAN</b>
OPTION DESCRIPTION	<b>ELEVATION - B</b>

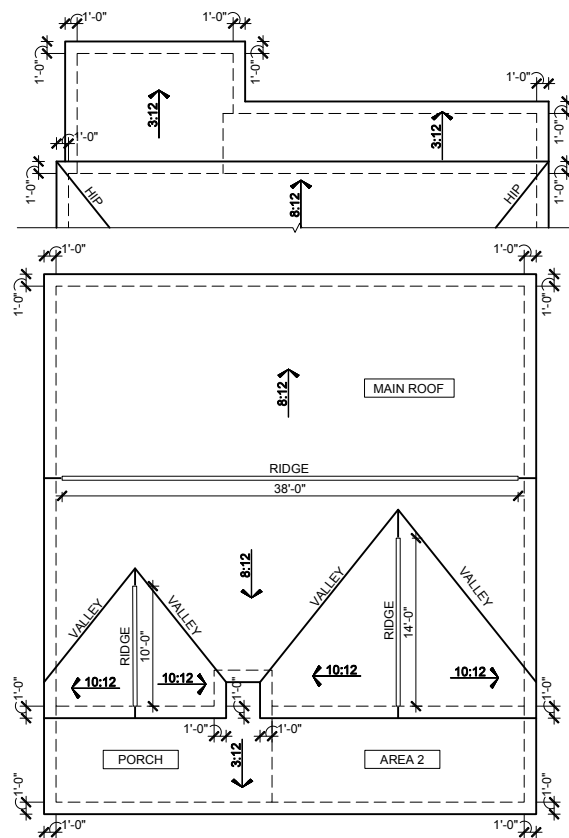
SHEET NO. **A-2.0B**

ELEVATION "A - C"

# PRINCE PLACE LOT 49

## OPT. EXTENDED FAMILY W/ OPT. SCREENED PORCH ROOF PLAN

SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)



## WILLOW ELEVATION -B- ROOF PLAN

SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)

## ATTIC VENT CALCULATIONS

### NOTES:

- GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL.
- ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.
- PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.
- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.
- DASHED LINES INDICATE WALL BELOW.
- LOCATE GUTTER AND DOWNSPOUTS PER BUILDER.
- PITCHED ROOFS AS NOTED.
- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.
- ALL PLUMBING VENTS SHALL BE COMBINED INTO A MINIMUM AMOUNT OF ROOF PENETRATIONS. ALL ROOF PENETRATIONS SHALL OCCUR TO THE REAR OF THE MAIN RIDGE

### MAIN ROOF

1518 SQ FT UNDER ROOF ATTIC  
300 SQ FT / 1 SQ FT = 5.06 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT)  
SOFFIT VENTS 9 SQ IN = (.0625 SQ FT)  
BOX VENTS 50 SQ IN = (.347 SQ FT)

5.06 SQ FT x 50% = 2.530 SQ FT OF RIDGE  
5.06 SQ FT x 50% = 2.530 SQ FT OF SOFFIT

RIDGE VENT  
2.530 SQ FT = 20.2 FEET OF RIDGE VENT  
0.125 SQ FT  
SOFFIT VENT  
2.530 SQ FT = 40.5 FEET OF SOFFIT VENT  
0.0625 SQ FT

ACTUAL RIDGE VENT PROVIDED 40 FEET  
ACTUAL SOFFIT VENT PROVIDED 140 FEET  
NUMBER OF BOX VENTS NEEDED -6.9 COUNT  
(REQ - ACTUAL x .347) (NEGATIVE = 0)

### PORCH ROOF

115 SQ FT UNDER ROOF  
150 SQ FT / 1 SQ FT = 0.77 SQ FT VENTILATION

SOFFIT VENTS 9 SQ IN = (.0625 SQ FT)  
ASSUME 100% VENTING @ SOFFIT

SOFFIT VENT  
0.767 SQ FT = 12.3 FEET OF SOFFIT VENT  
0.0625 SQ FT

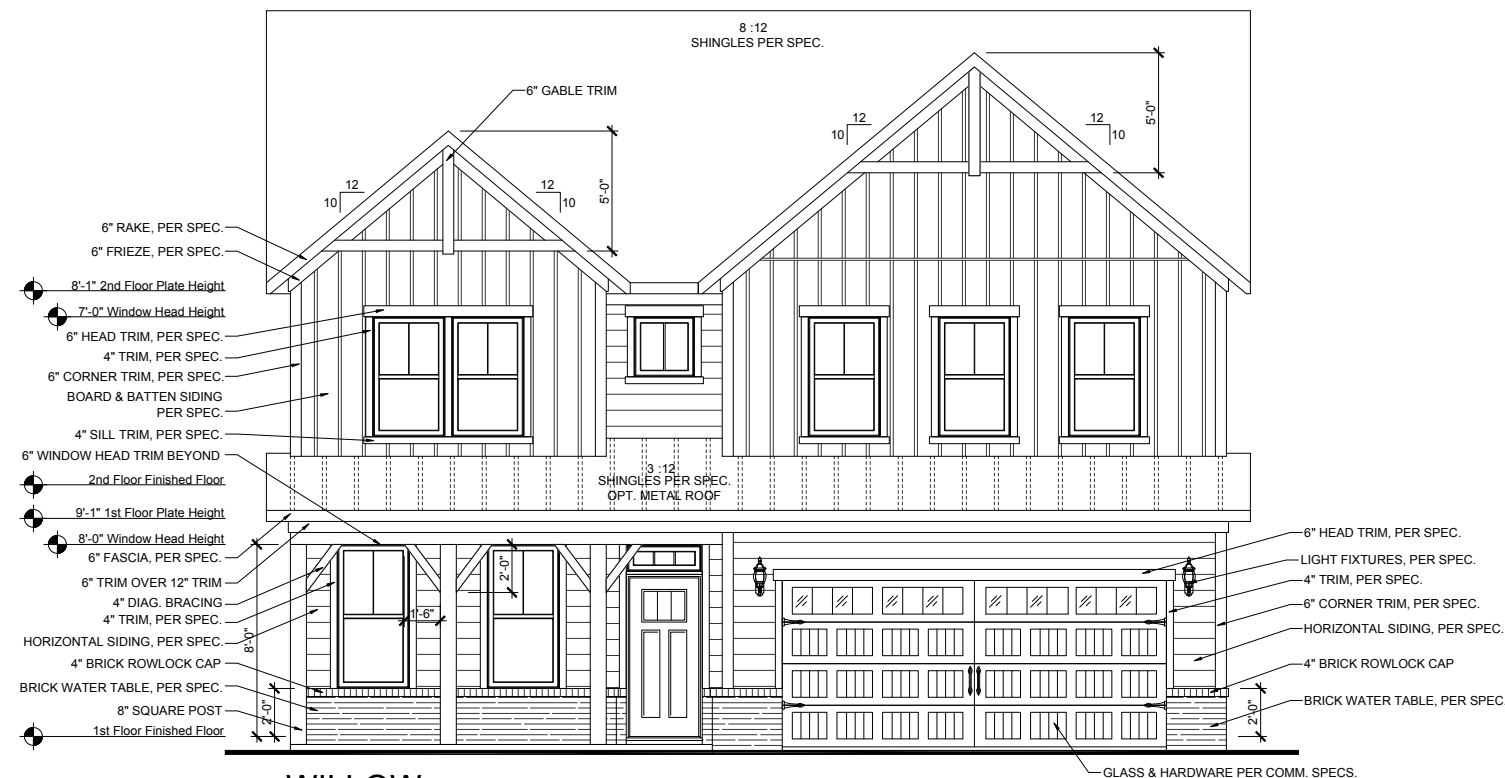
ACTUAL SOFFIT VENT PROVIDED 13 FEET



## OPT. EXTENDED FAMILY W/ OPT. SCREENED PORCH REAR ELEVATION

SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

BRICK FOUNDATION  
PER COMM. SPECS.



## WILLOW FRONT ELEVATION - 'B'

SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

REVISION NUMBER	DESCRIPTION
03/05/2020	ADDED BASEMENT FOUNDATIONS
07/1/2020	UPDATED SHOWER OPTIONS
10/23/2020	ADDED GAR SVR DR & OPT EXT FAMILY
11/6/2020	ADD OPT PORCHS TO OPT EXT FAMILY
3/30/2021	REVISION TO WH & GARAGE DOORS
02/24/2022	FIX WINDOW SIZE TO .2626 FX ON D

**MAIN STREET**  
DESIGNS

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RELEASE DATE	08-21-2019
PROJECT NUMBER	-----
OPTION NO.	-----

MODEL	WILLOW
DRAWING TITLE	EXT. ELEV/ ROOF PLAN
OPTION DESCRIPTION	ELEVATION - B

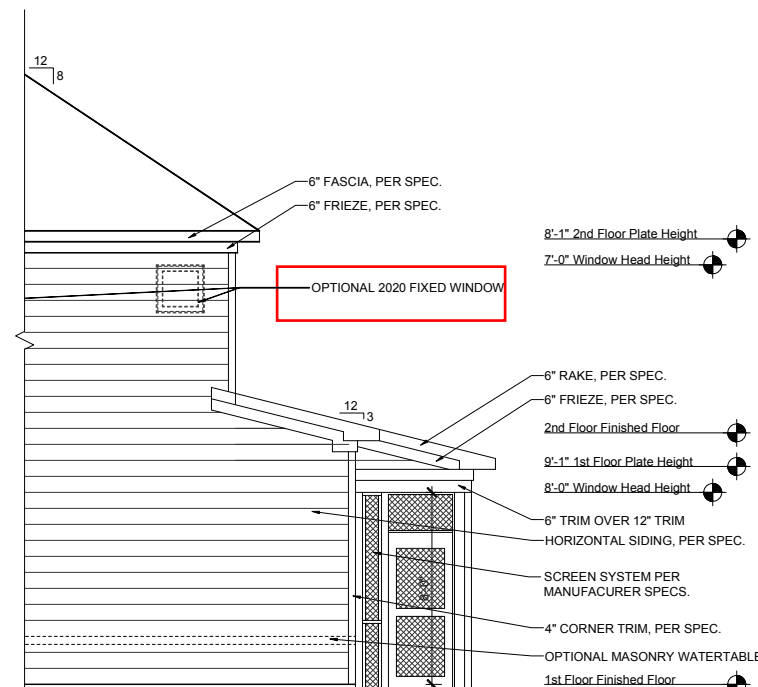
SHEET NO.  
**A-3.0B**

ELEVATION "A - C"

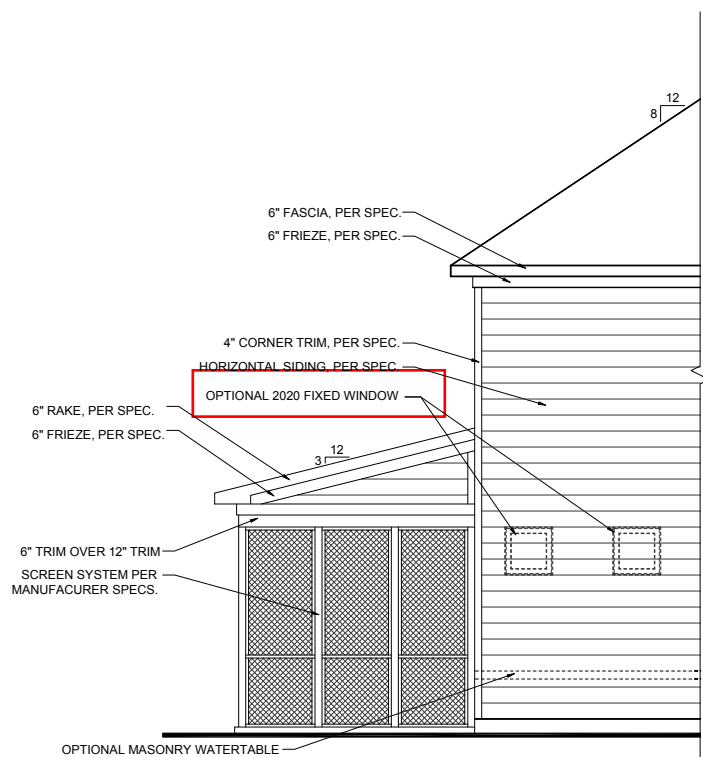
# PRINCE PLACE LOT 49



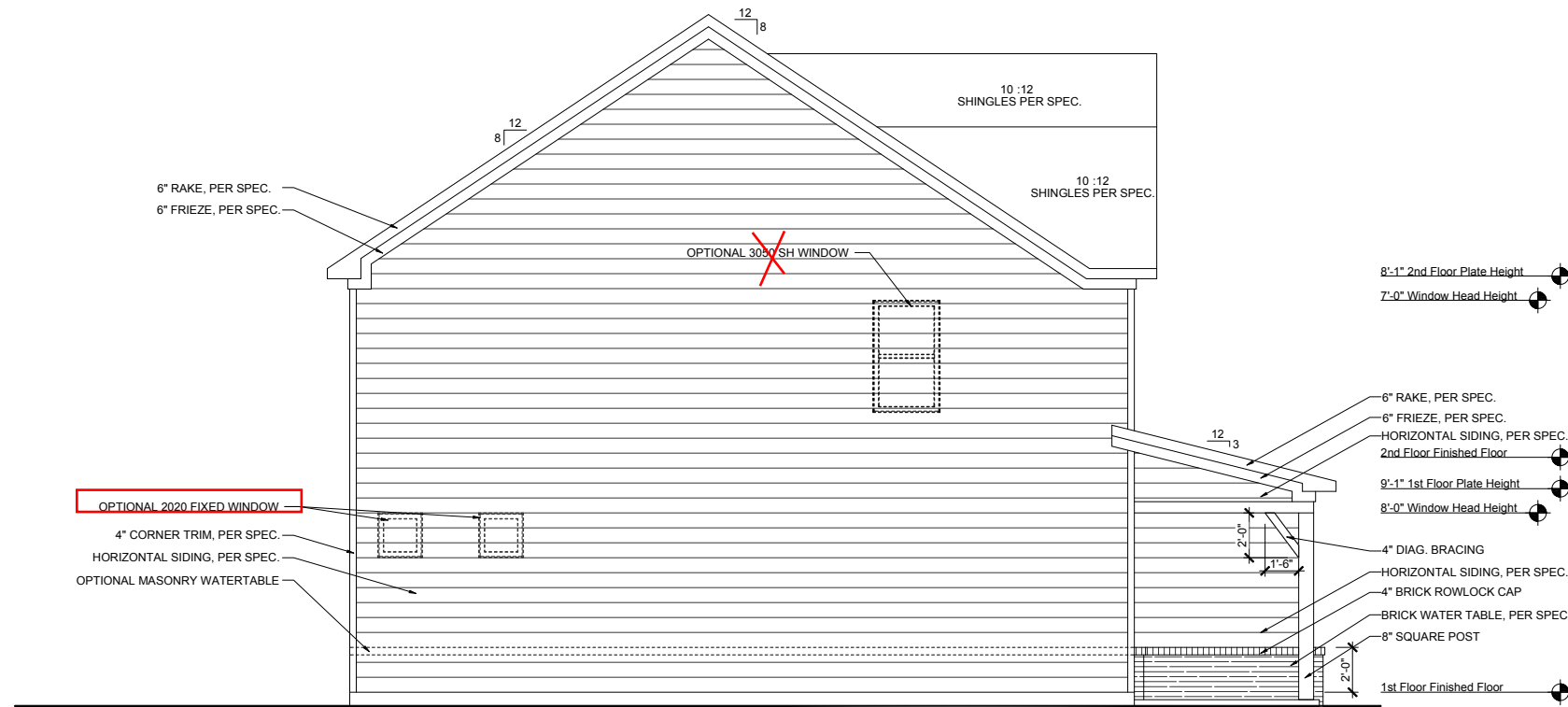
**WILLOW  
RIGHT ELEVATION - 'B'**  
SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)



**OPT. EXTENDED FAMILY W/  
OPT. SCREENED PORCH  
RIGHT ELEVATION**  
SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)



**OPT. EXTENDED FAMILY W/  
W/ OPT. SCREENED PORCH  
LEFT ELEVATION**  
SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)



**WILLOW  
LEFT ELEVATION - 'B'**  
SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

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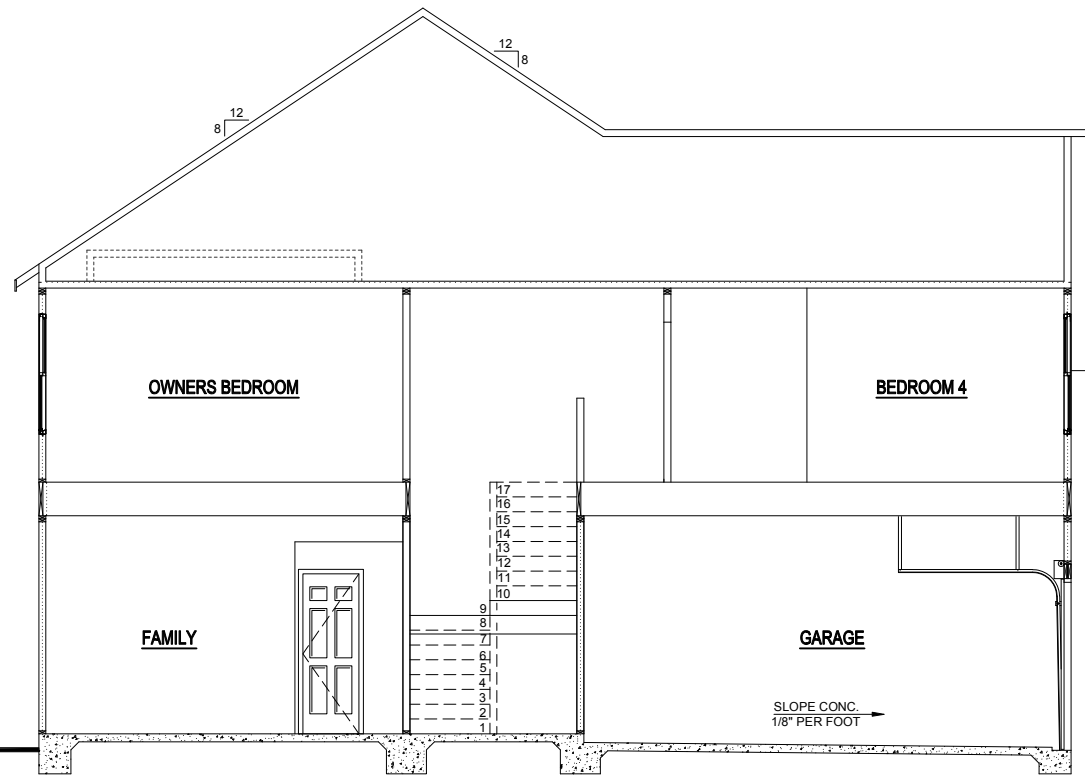
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1/8"=1'-0"
RELEASE DATE 08-21-2019
PROJECT NUMBER -----
OPTION NO. -----
MODEL <b>WILLOW</b>
DRAWING TITLE <b>SIDE ELEVATIONS</b>
OPTION DESCRIPTION ELEVATION - B
SHEET NO. <b>A-3.1B</b>

ELEVATION "A - C"





**SECTION - B @ SLAB**  
 SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

8'-1" 2nd Floor Plate Height  
 7'-0" Window Head Height  
 2nd Floor Finished Floor  
 9'-1" 1st Floor Plate Height  
 8'-0" Window Head Height  
 1st Floor Finished Floor



**SECTION - A @ SLAB**  
 SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

8'-1" 2nd Floor Plate Height  
 7'-0" Window Head Height  
 2nd Floor Finished Floor  
 9'-1" 1st Floor Plate Height  
 8'-0" Window Head Height  
 1st Floor Finished Floor

REVISION NUMBER	DESCRIPTION
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MODEL	<b>WILLOW</b>
DRAWING TITLE	<b>BUILDING SECTIONS</b>
OPTION DESCRIPTION	
RELEASE DATE	08-21-2019
PROJECT NUMBER	-----
OPTION NO.	-----

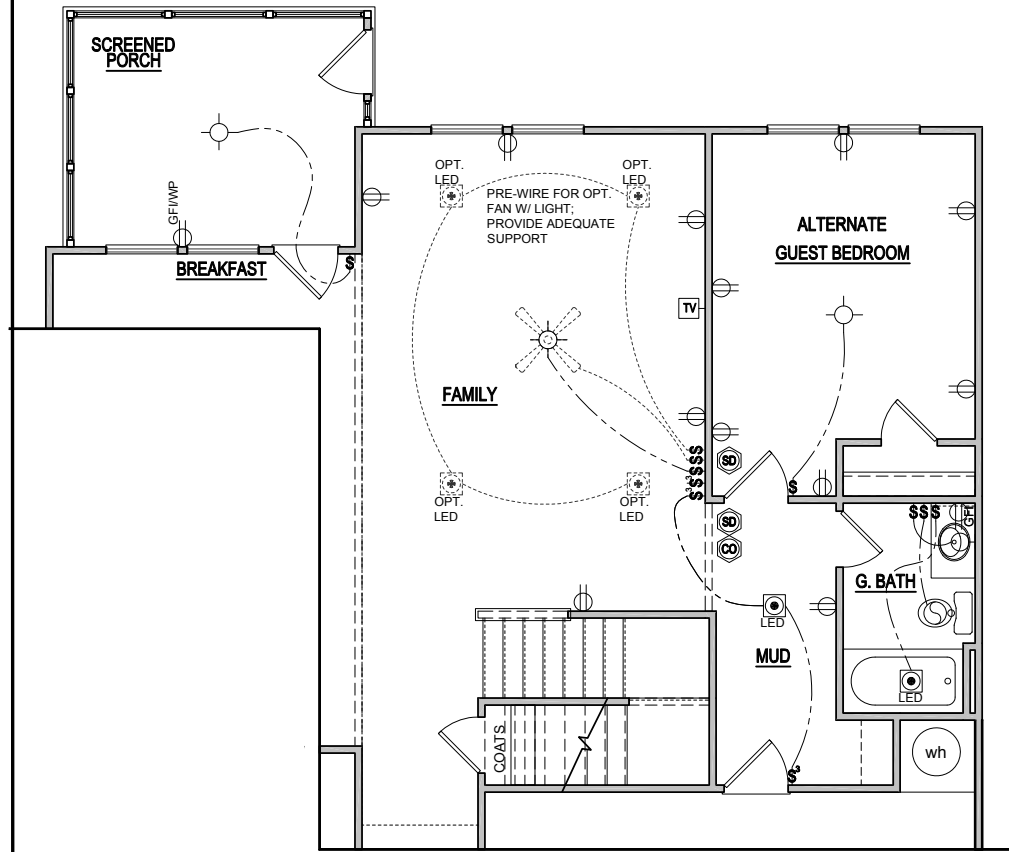
SHEET NO.  
**A-4.0B**

1/8" = 1'-0"

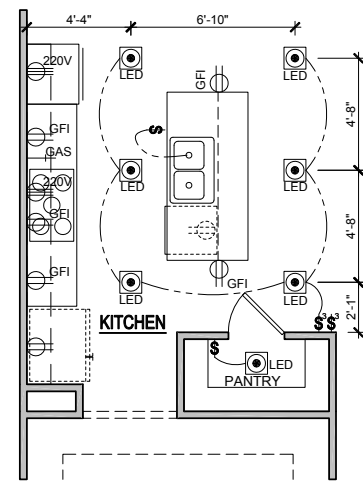
# PRINCE PLACE LOT 49

## ELECTRICAL KEY

- CEILING RECEP.
- DUPLEX RECEP.
- SPLIT SWITCHED RECEP.
- FLOOR RECEP
- QUADPLEX RECEP
- GFI GROUND FAULT RECEP
- GFI/WP WEATHER PROOF RECEP
- 220V 220v RECEP
- EXHAUST FAN
- EXHAUST FAN / LIGHT
- EXHAUST FAN / HEAT LIGHT
- LED
- VAPOR PROTECTED LIGHT
- CEILING LIGHT
- HANGING CEILING LIGHT
- WALL LIGHT
- WALL SCONCE LIGHT
- SINGLE SWITCH
- 3-WAY SWITCH
- 4-WAY SWITCH
- DIMMER SWITCH
- CABLE T.V. JACK
- BUTTON
- PHONE JACK
- DIRECT WIRE
- SECURITY SYSTEM PHONE JACK
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- ELECTRICAL PANEL
- DISCONNECT SWITCH
- ELECTRIC METER
- 1 TUBE FLUORESCENT
- 2 TUBE FLUORESCENT
- FLOOD LIGHT
- CHIMES
- CEILING FAN
- CEILING FAN W/ LIGHT



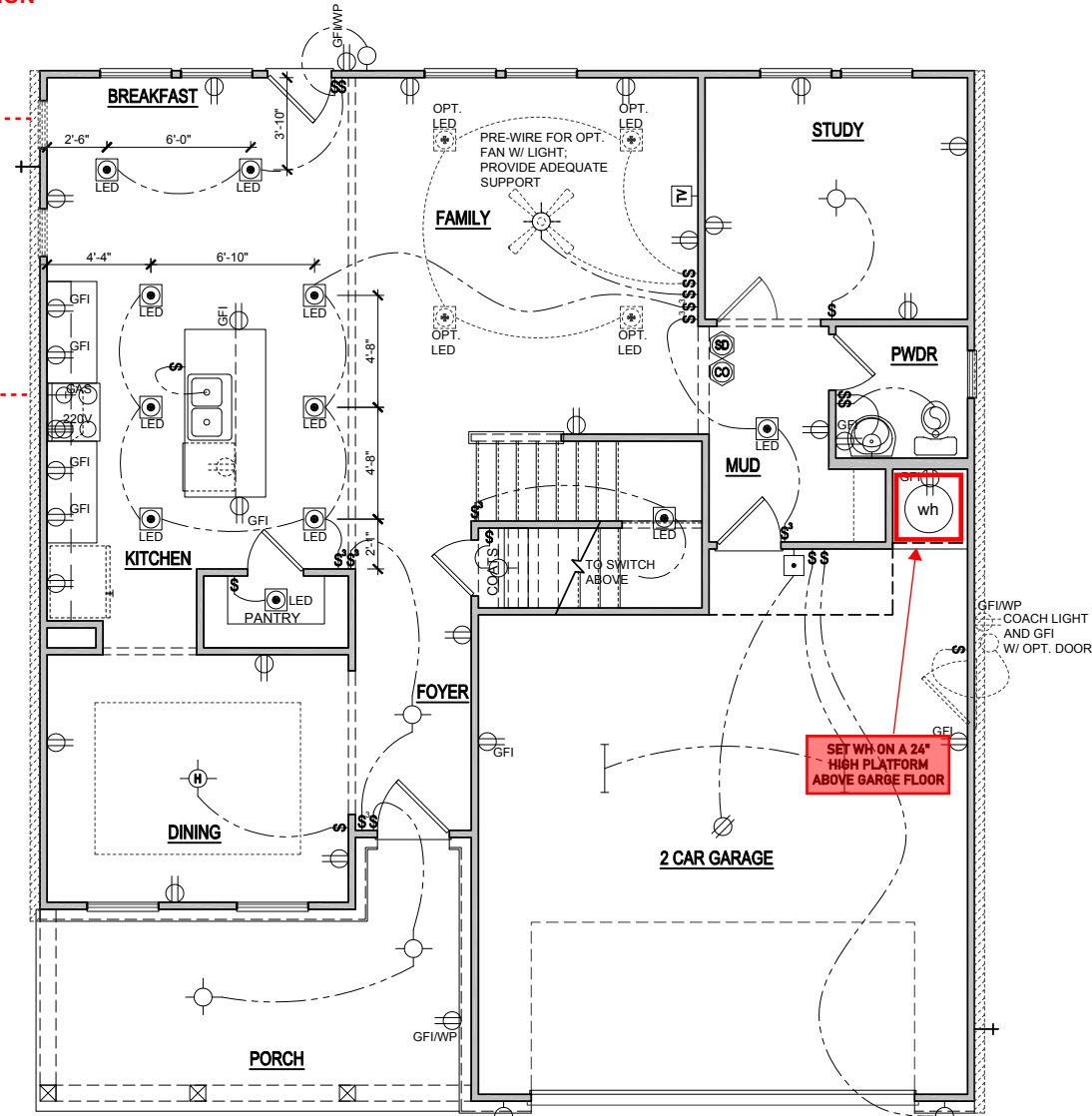
**ELECTRICAL PLAN  
OPT. EXTENDED FAMILY W/  
OPT. SCREENED PORCH**  
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



**1st FLOOR PLAN  
OPT. GOURMET KITCHEN**  
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

**NOTE; PROPANE TANK  
TO BE SET  
5' FROM VENTS  
10' FROM IGNITION**

**PROPANE  
TANK**



**ELEVATION - B  
FIRST FLOOR ELECTRICAL PLAN**  
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

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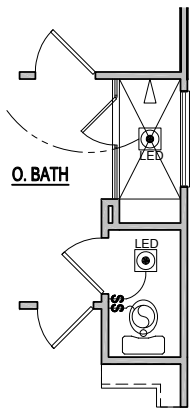
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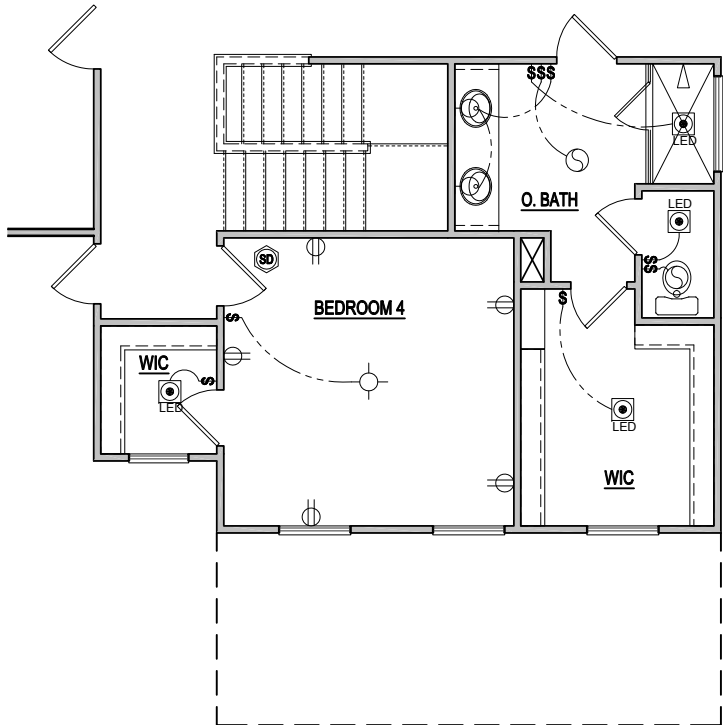
RELEASE DATE	08-21-2019
PROJECT NUMBER	
OPTION NO.	
MODEL	<b>WILLOW</b>
DRAWING TITLE	<b>1ST FLOOR ELEC. PLAN</b>
OPTION DESCRIPTION	<b>ELEVATION - B</b>
SHEET NO.	<b>E-1.0B</b>

ELEVATION "A - C"

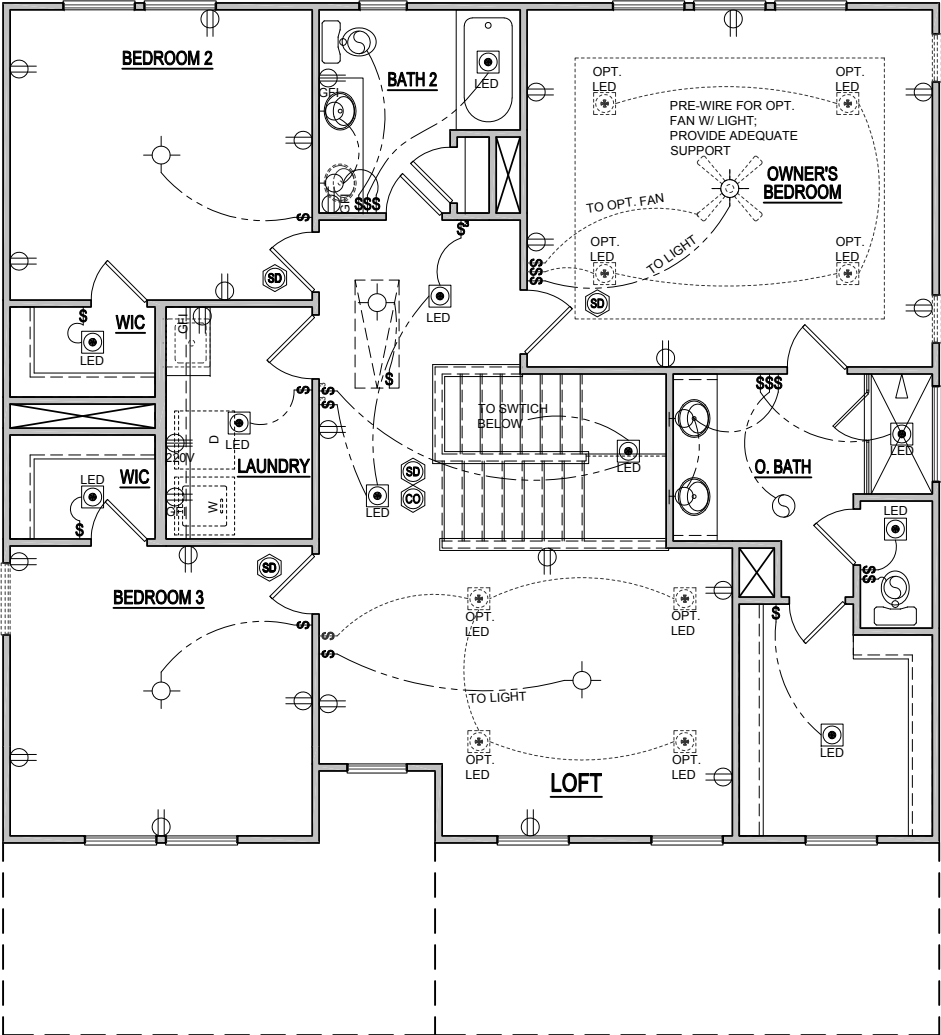
# PRINCE PLACE LOT 49



**OPT. SPA SHOWER**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



**ELEVATION 'B'  
 OPT. BEDROOM 4 LAYOUT**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



**ELEVATION - B  
 SECOND FLOOR ELECTRICAL PLAN**  
 SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)  
 SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

REVISION NUMBER	DESCRIPTION
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RELEASE DATE	08-21-2019
PROJECT NUMBER	-----
OPTION NO.	-----

MODEL	<b>WILLOW</b>
DRAWING TITLE	<b>SECOND FLOOR PLAN</b>
OPTION DESCRIPTION	<b>ELEVATION - B</b>

SHEET NO. **E-2.0B**

ELEVATION "A - C"



**NOTE; PROPANE TANK  
TO BE SET  
5' FROM VENTS  
10' FROM IGNITION**

# PRINCE PLACE LOT 49

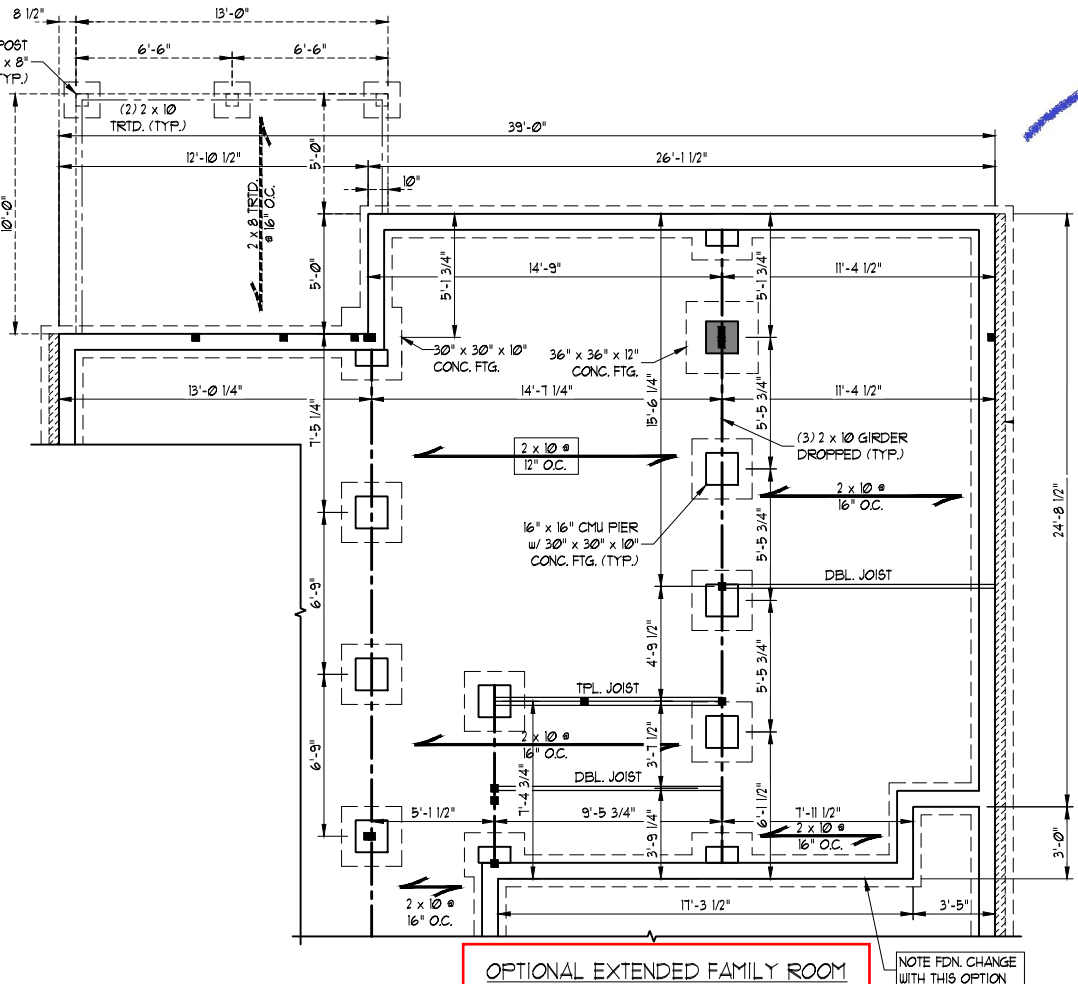
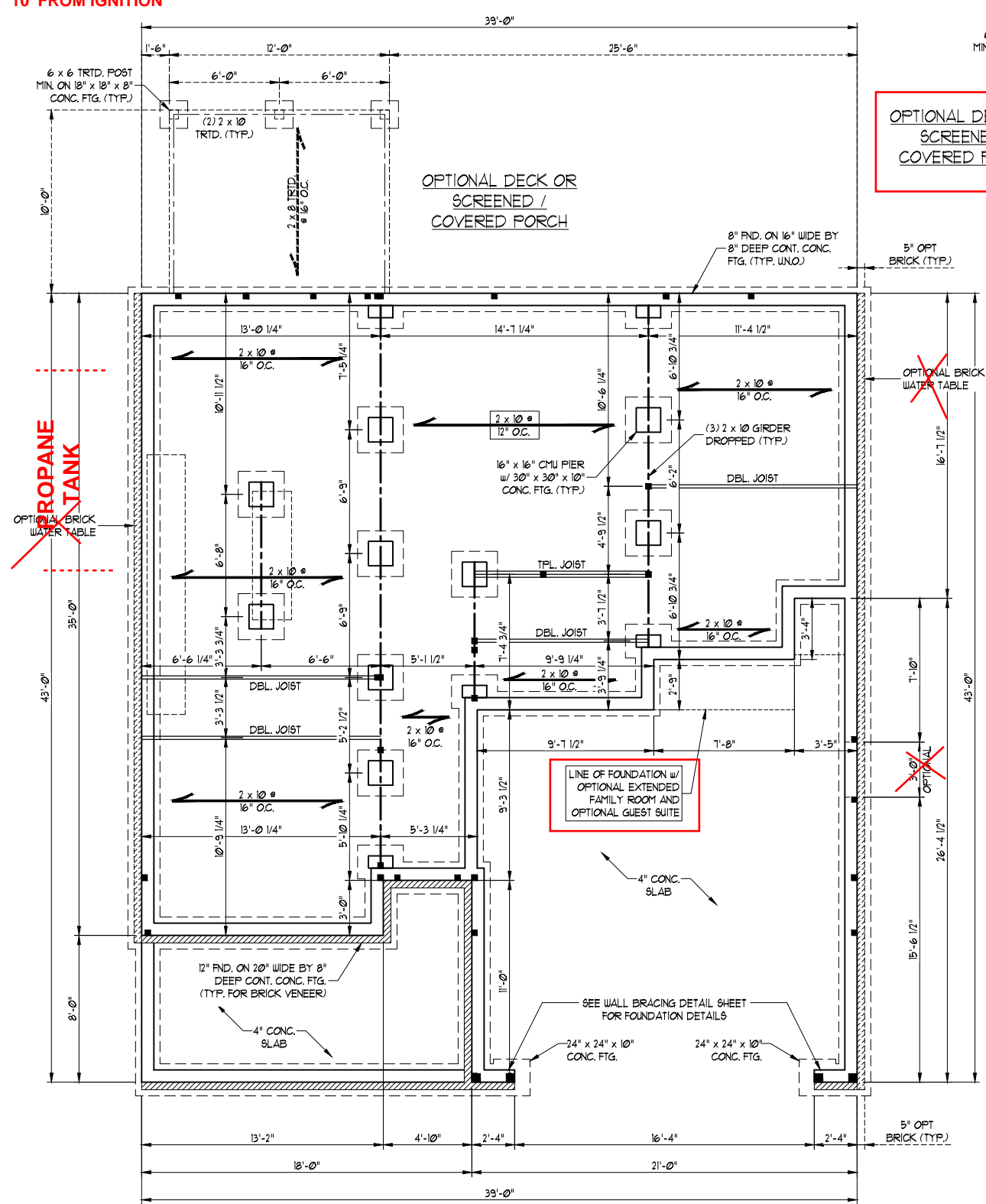
**SCALE NOTE:**  
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.  
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



1/3/2023

**J.S. THOMPSON  
ENGINEERING, INC**  
606 WADE AVE., SUITE 104 RALEIGH, NC 27605  
PHONE: (919) 789-9919 FAX: (919) 789-9921  
N.C. LICENSE NO.: C-1733

WILLOW  
DAVIDSON HOMES



**120 MPH ULTIMATE DESIGN WIND SPEED  
NOTES FOR LESS THAN  
30' MEAN ROOF HEIGHT:**

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 1" INTO MASONRY OR CONCRETE. LOCATE BOLT WITH MIDDLE THIRD OF PLATE WIDTH. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS.
- WALL CLADDING DESIGNED FOR 45.5 PSF AND -18 PSF (+/-) INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
- ROOF CLADDING DESIGNED FOR 44.2 PSF AND -18 PSF FOR ROOF PITCHES 1/2 TO 12/12 AND 40 PSF AND -36 PSF FOR ROOF PITCHES 22.5/12 TO 1/12.
- INSTALL 1/8" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STOREYS IN ACCORDANCE WITH SECTION R602.03 OF THE NRC, 2018 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2018 EDITION.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

**STRUCTURAL NOTES:**

- ALL FRAMING LUMBER TO BE #2 SPF OR #2 SYP (UNO). ALL TREATED LUMBER TO BE #2 SYP (UNO).
- INSTALL A DOUBLE OR TRIPLE JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION.
- SHADED PIERS TO BE FILLED SOLID.
- INSTALL LADDER WIRE @ 16" O.C. TO SECURE MULTIPLE WYTHE FOUNDATION WALLS TOGETHER.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

ELEVATION B

DATE: JANUARY 3, 2023  
SCALE: 1/4" = 1'-0"  
DRAWN BY: MAIN STREET DESIGN  
ENGINEERED BY: ZHH

S-1.1i  
CRAWL FOUNDATION  
PLAN w/ OPT. 2 x 10 JOISTS

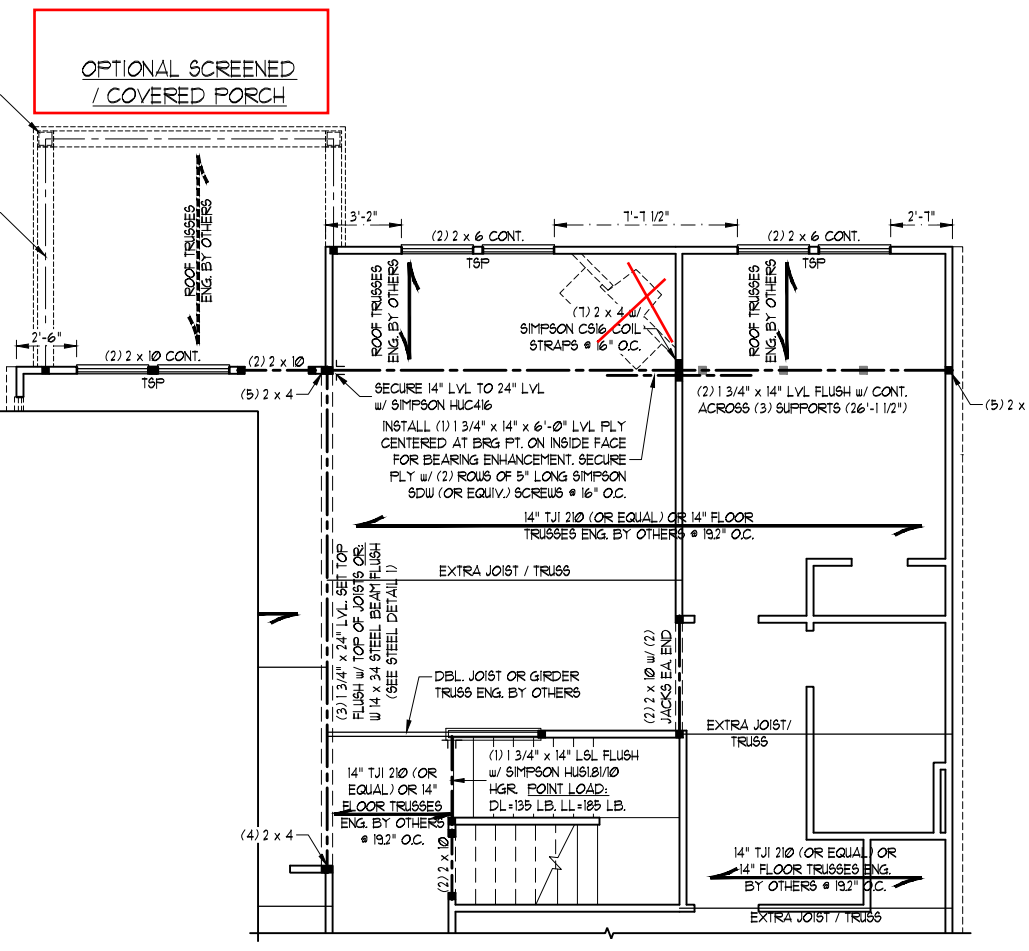
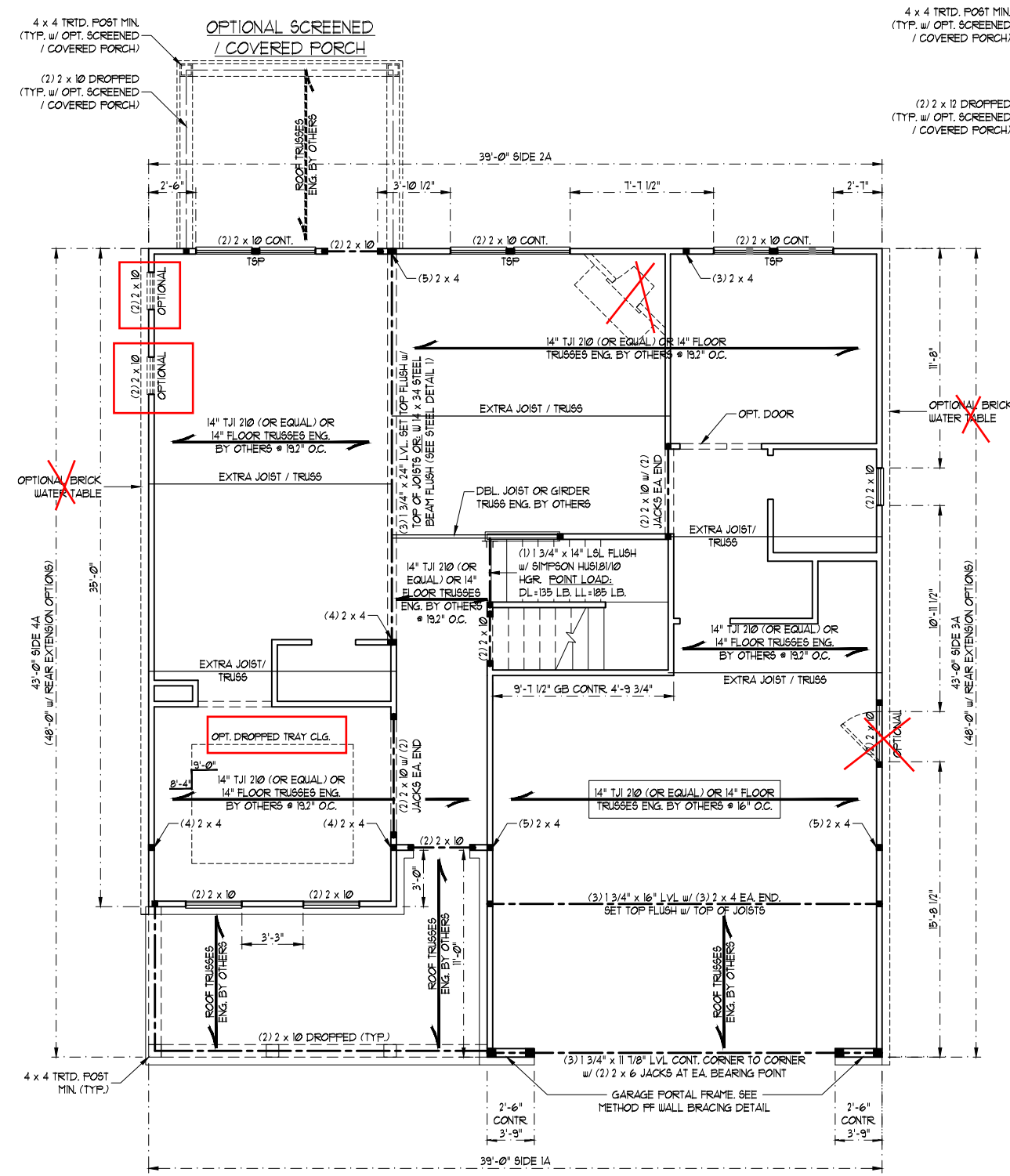
# PRINCE PLACE LOT 49

SCALE NOTE:  
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.  
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



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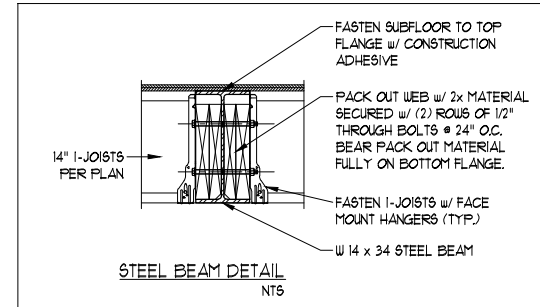
WILLOW  
DAVIDSON HOMES



- BRACED WALL DESIGN NOTES:**
- BRACED WALL DESIGN PER SECTION R602.10 OF THE NCRC 2018 EDITION.
  - C5-WSP REFERS TO "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" CONTRACTOR IS TO INSTALL 1/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
  - GB REFERS TO "GYPSUM BOARD" CONTRACTOR IS TO INSTALL 1/2" (MIN) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
  - BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
  - SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

**BRACED WALL DESIGN**

RECTANGLE A	RECTANGLE B
SIDE 1A (FRONT LOAD) METHOD: C5-WSP/GB/FF TOTAL REQUIRED LENGTH: 12.7' TOTAL PROVIDED LENGTH: 15.56'	SIDE 1B METHOD: FF TOTAL REQUIRED LENGTH: 25.1' TOTAL PROVIDED LENGTH: 6.0'
SIDE 2A (OPT. EXTENSION) METHOD: C5-WSP TOTAL REQUIRED LENGTH: 12.7' TOTAL PROVIDED LENGTH: 15.88'	SIDE 2B METHOD: C5-WSP TOTAL REQUIRED LENGTH: 25.1' TOTAL PROVIDED LENGTH: 12.0'
SIDE 3A (SIDE LOAD) METHOD: C5-WSP/FF TOTAL REQUIRED LENGTH: 10.64' TOTAL PROVIDED LENGTH: 26.5'	SIDE 3B METHOD: C5-WSP TOTAL REQUIRED LENGTH: 2.0' TOTAL PROVIDED LENGTH: 19.33'
SIDE 4A METHOD: C5-WSP TOTAL REQUIRED LENGTH: 10.64' TOTAL PROVIDED LENGTH: 49.0'	SIDE 4B/3A COMBINED METHOD: C5-WSP TOTAL REQUIRED LENGTH: 12.64' TOTAL PROVIDED LENGTH: 21.0'



**NOTE:**  
BCI 5000s-1B JOISTS MAY BE USED IN LIEU OF TJI 210 JOISTS AT THE DEPTH AND SPACING INDICATED ON THE PLANS.

**TABLE R602.15**  
MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES) (PER TABLE R602.3.5)	
	16	24
UP TO 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

- STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE SFF #2 OR SYP #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO).
  - ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 SFF #2 OR SYP #2 (KILN DRIED) (UNO). HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS. CODE TABLES HAVE NOT BEEN USED.
  - INSTALL AN EXTRA JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS.
  - WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO). SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
  - SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO).
  - ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS w/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS AT TOP (UNO).
  - FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB w/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS w/ 1/4" THROUGH BOLTS w/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

\*TSP\* INDICATES TRIPLE STUD POCKET BETWEEN WINDOW UNITS.

DATE: JANUARY 3, 2023  
SCALE: 1/4" = 1'-0"  
DRAWN BY: MAIN STREET DESIGN  
ENGINEERED BY: ZHH

S-3a  
SECOND FLOOR FRAMING PLAN

# PRINCE PLACE LOT 49

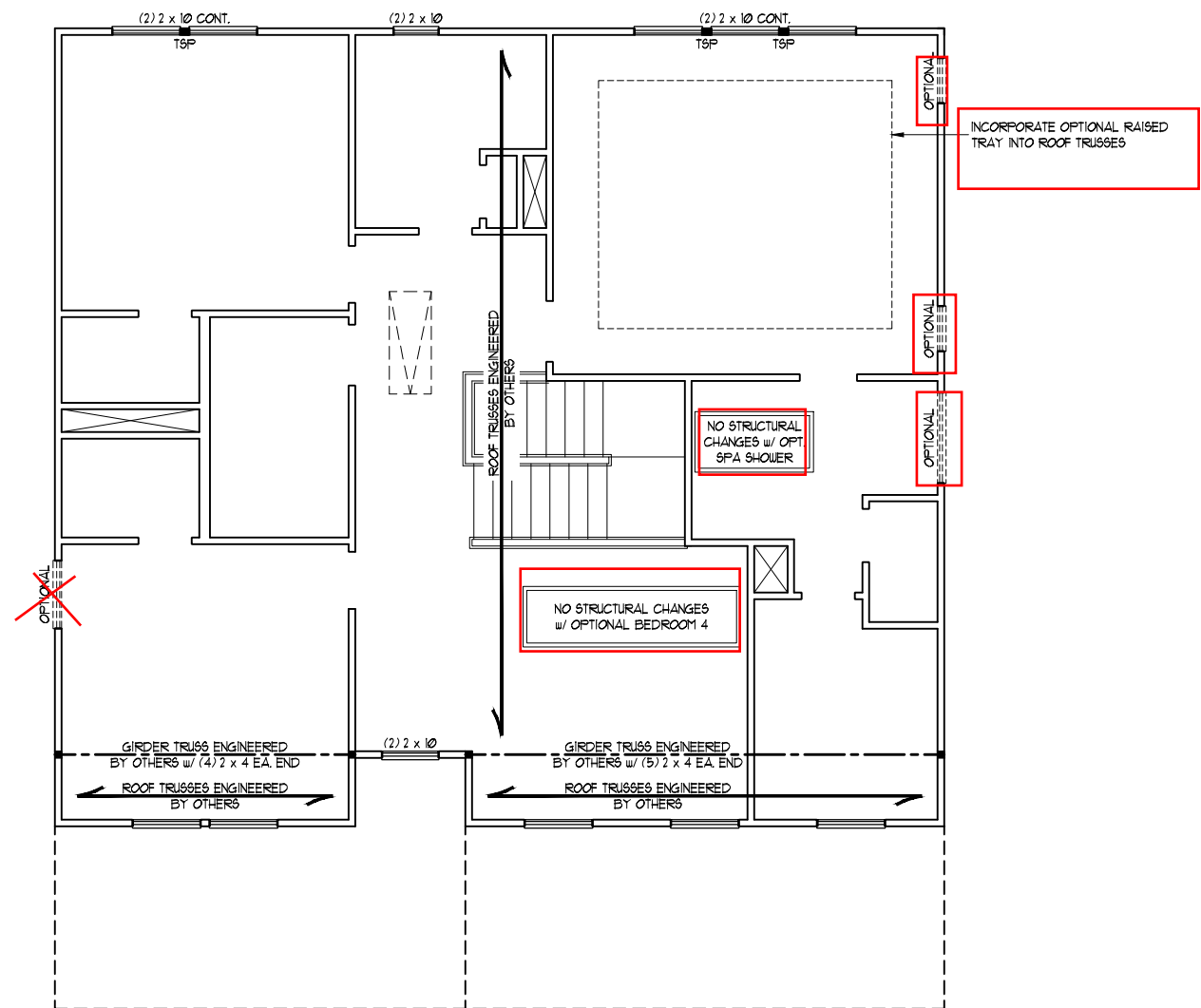
SCALE NOTE:  
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1/3/2023

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WILLOW  
DAVIDSON HOMES



- BRACED WALL DESIGN NOTES:**
- BRACED WALL DESIGN PER SECTION R602.10 OF THE NRC 2018 EDITION.
  - CS-USP REFERS TO "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" CONTRACTOR IS TO INSTALL 1/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
  - \*GB REFERS TO "GYPSUM BOARD" CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
  - BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NRC 2018 EDITION.
  - SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

- NOTE:**
- PER SECTION R602.10.3.2 OF THE 2018 NRC, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT REQUIRED FOR THE FIRST FLOOR AND NO BRACED WALL ANALYSIS IS REQUIRED.
  - SHEATH ALL EXTERIOR WALLS WITH 1/16" OSB SHEATHING ATTACHED WITH 8d NAILS AT 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.

- STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE #2 SPF OR #2 SYP (UNO).
  - ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
  - WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO). SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
  - SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS (UNO).
  - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

"T&P" INDICATES TRIPLE STUD POCKET BETWEEN WINDOW UNITS.

TABLE R602.15  
MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES) (PER TABLE R602.3/5)	
	16	24
UP TO 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

ELEVATION B

DATE: JANUARY 3, 2023  
SCALE: 1/4" = 1'-0"  
DRAWN BY: MAIN STREET DESIGN  
ENGINEERED BY: ZHH

S-4a  
ATTIC FLOOR  
FRAMING PLAN

# PRINCE PLACE LOT 49

SCALE NOTE:  
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.  
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



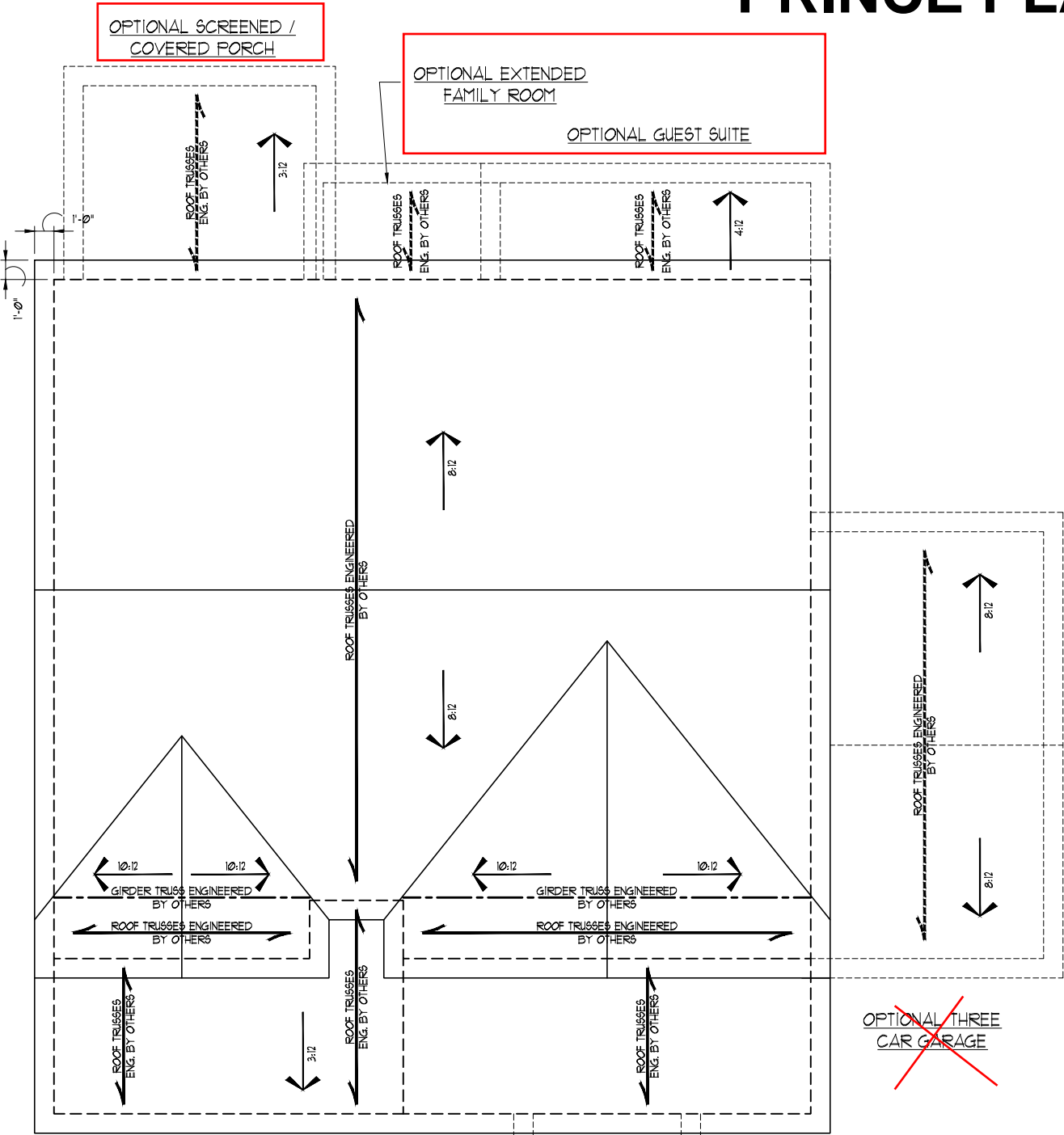
1/3/2023

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WILLOW  
DAVIDSON HOMES

**STRUCTURAL NOTES:**

1. ALL FRAMING LUMBER TO BE #2 SPF OR #1 SYP (INO).
2. STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
3. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H25A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.
4. REFER TO SECTION R202.11 OF THE 2018 NCRS FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



ELEVATION B

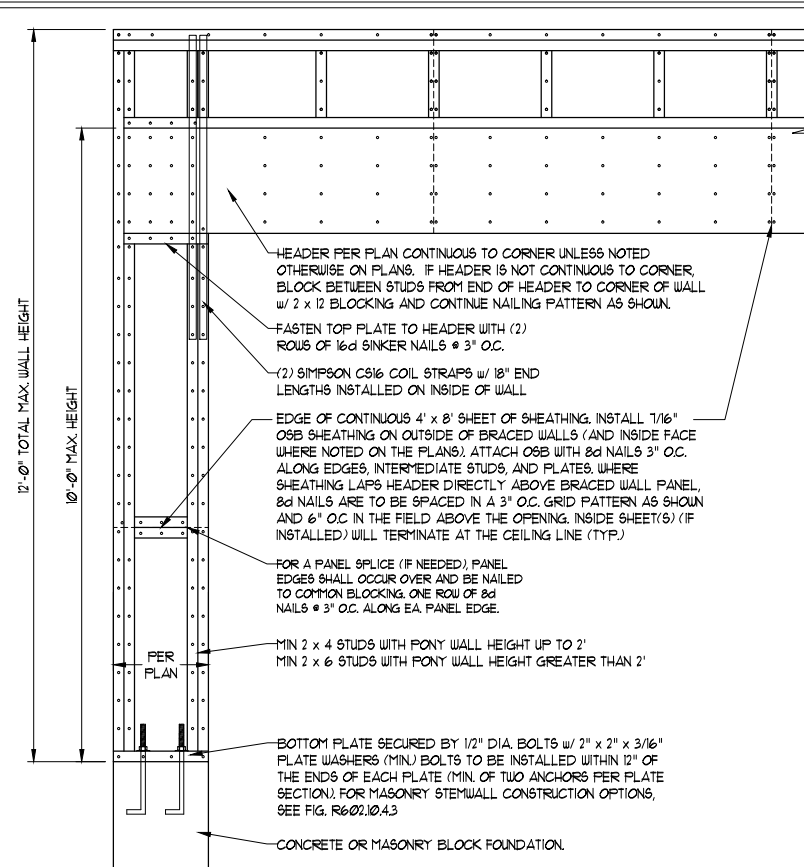
DATE: JANUARY 3, 2023  
SCALE: 1/4" = 1'-0"  
DRAWN BY: MAIN STREET DESIGN  
ENGINEERED BY: ZHH

S-5a  
ROOF FRAMING  
PLAN

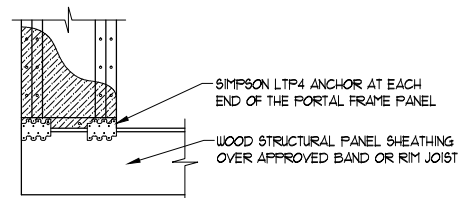


**GENERAL WALL BRACING NOTES:**

1. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NRC.
2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NRC FOR ADDITIONAL INFORMATION AS NEEDED.
3. BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3). WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.
4. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
5. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED. WHEN NOT USING METHOD "GB", GYPSUM TO BE FASTENED PER TABLE R102.3.5. METHOD GB TO BE FASTENED PER TABLE R602.10.
7. CS-WSP REFERS TO THE "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.131" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO).
8. GB REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. 1/2" (MIN) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (UNO). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R102.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY.
9. REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602.10.3. METHOD CS-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 15 TIMES ITS ACTUAL LENGTH.

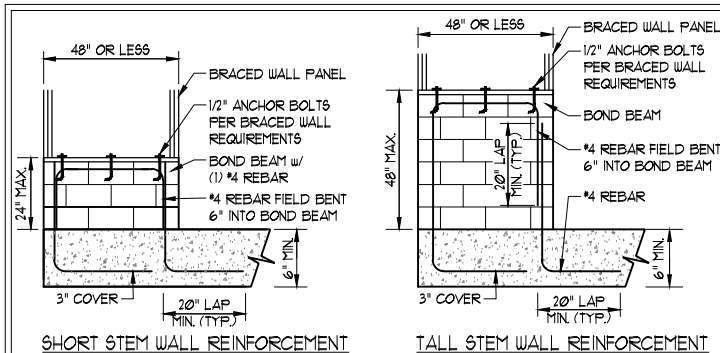


OVER CONCRETE OR MASONRY BLOCK FOUNDATION

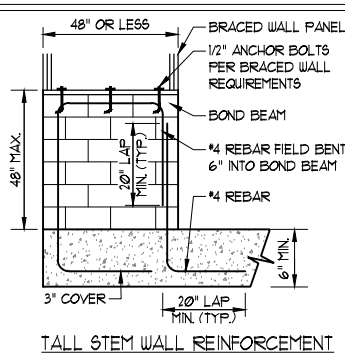


OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION  
 \* APPLICABLE w/ GREATER THAN 12" KNEE WALL HEIGHTS IN CRAWL SPACE AND ABOVE FRAMED BASEMENT WALLS \*

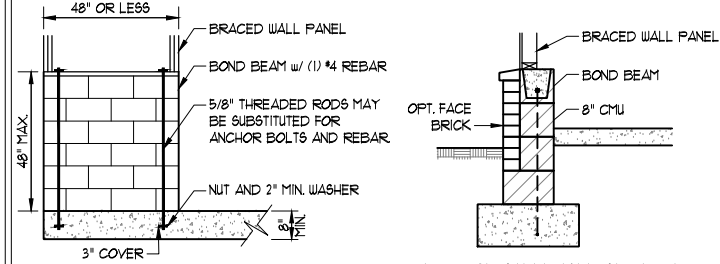
**METHOD PF-PORTAL FRAME DETAIL ①**



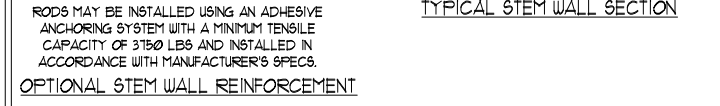
SHORT STEM WALL REINFORCEMENT



TALL STEM WALL REINFORCEMENT

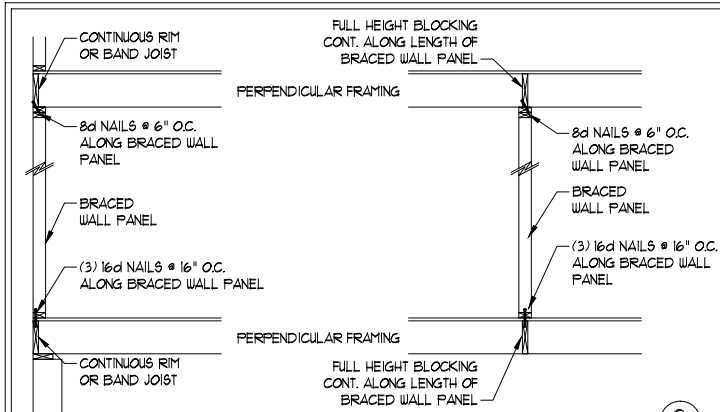


TYPICAL STEM WALL SECTION

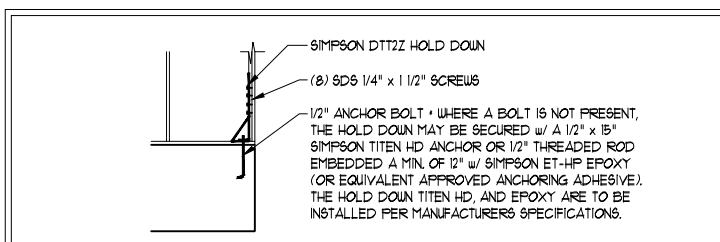


OPTIONAL STEM WALL REINFORCEMENT

NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS  
**MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS ②**  
 PER FIGURE R602.10.4.3

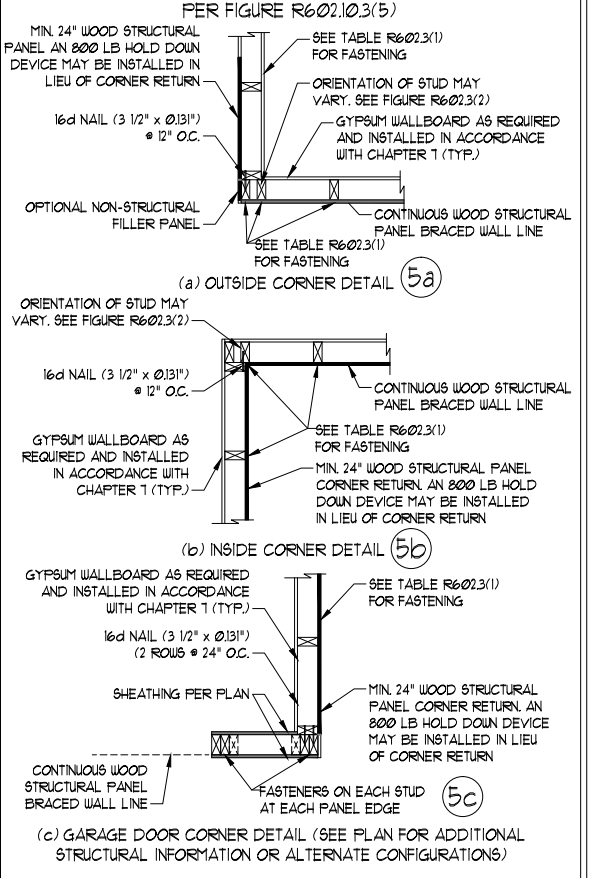


**BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING ③**  
 PER FIGURE R602.10.4.4(1)

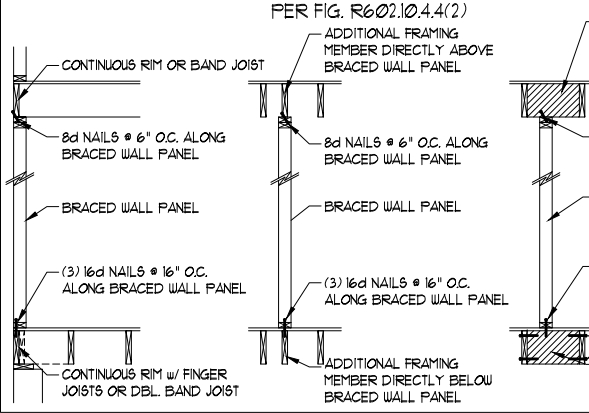


**HOLD DOWN DETAIL FOR MASONRY FOUNDATION OR MONOLITHIC SLAB ④**  
 \* APPLICABLE ONLY WHERE SPECIFIED ON PLAN \*

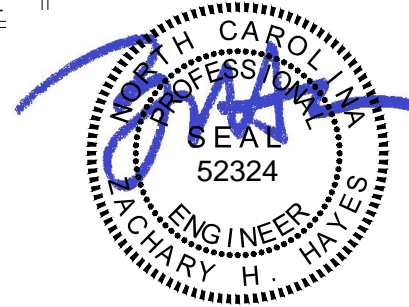
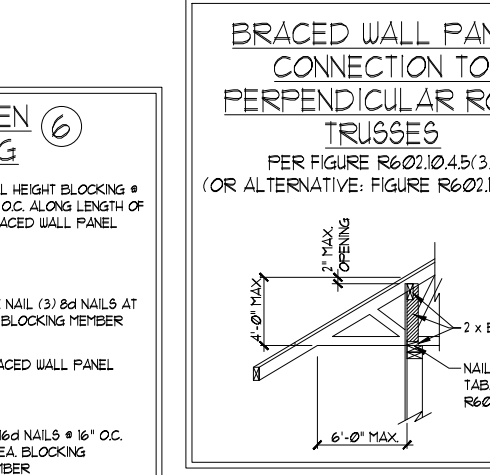
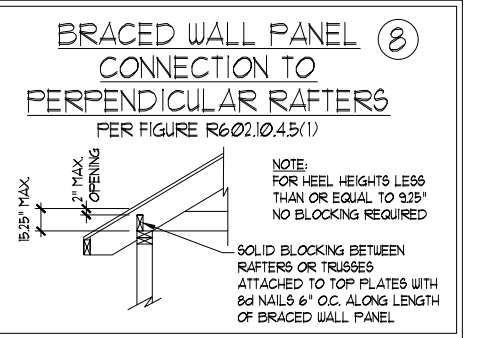
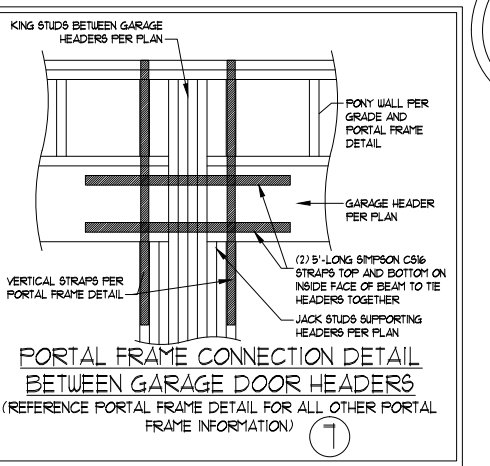
**TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING ⑤**



**BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING ⑥**



SCALE NOTE:  
 LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.  
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WILLOW DAVIDSON HOMES

DATE: JANUARY 3, 2023  
 SCALE: 1/4" = 1'-0"  
 DRAWN BY: MAIN STREET DESIGN  
 ENGINEERED BY: ZHH

D4 WALL BRACING NOTES AND DETAILS

1/3/2023

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**GENERAL NOTES**

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NRC, 2018 EDITION (R301.4 - R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAILS/GUARDRAILS	200 LB OR 50 (PLF)	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R302(4) WIND ZONE AND EXPOSURE)		
GROUND SNOW LOAD: P <sub>g</sub>	20 (PSF)		

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD

- FOR 15 AND 20 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NRC, 2018 EDITION. FOR 30 MPH, 40 MPH, AND 50 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NRC, 2018 EDITION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2018 EDITION.

**FOOTING AND FOUNDATION NOTES**

- FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NRC, 2018 EDITION.
- PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" - 1" DEEP CONTROL JOINTS ARE TO BE SAUED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.(1), R404.1.(2), R404.1.(3), OR R404.1.(4) OF THE NRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.(5) OF THE NRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

**FRAMING NOTES**

- ALL FRAMING LUMBER SHALL BE #2 SPF (F<sub>b</sub> = 875 PSI, F<sub>v</sub> = 375 PSI, E = 1600000 PSI) OR #2 SYP (F<sub>b</sub> = 975 PSI, F<sub>v</sub> = 175 PSI, E = 1600000 PSI) MINIMUM UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM UNLESS NOTED OTHERWISE (UNO).
- LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: F<sub>b</sub> = 2600 PSI, F<sub>v</sub> = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: F<sub>b</sub> = 2325 PSI, F<sub>v</sub> = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: F<sub>c</sub> = 2500 PSI, E = 1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: F<sub>c</sub> = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS
 

A. W AND WT SHAPES:	ASTM A992
B. CHANNELS AND ANGLES:	ASTM A36
C. PLATES AND BARS:	ASTM A36
D. HOLLOW STRUCTURAL SECTIONS:	ASTM A500 GRADE B
E. STEEL PIPE:	ASTM A53, GRADE B, TYPE E OR S
- STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):
 

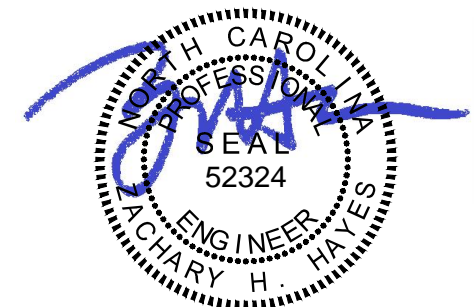
A. WOOD FRAMING	(2) 1/2" DIA. x 4" LONG LAG SCREWS
B. CONCRETE	(2) 1/2" DIA. x 4" WEDGE ANCHORS
C. MASONRY (FULLY GROUTED)	(2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ 16" O.C.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.1(1) AND R602.1(2) OF THE NRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.1.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
- BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (UNO). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.2.1 OF THE NRC, 2018 EDITION.
- FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO). POSTS MAY BE SECURED USING ONE SIMPSON H6 OR L7912 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON C916 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

**SCALE NOTE:**  
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.  
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE

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WILLOW  
DAVIDSON HOMES



1/3/2023

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DATE: JANUARY 3, 2023  
SCALE: 1/4" = 1'-0"  
DRAWN BY: MAIN STREET DESIGN  
ENGINEERED BY: ZHH

D-5  
STANDARD  
STRUCTURAL NOTES